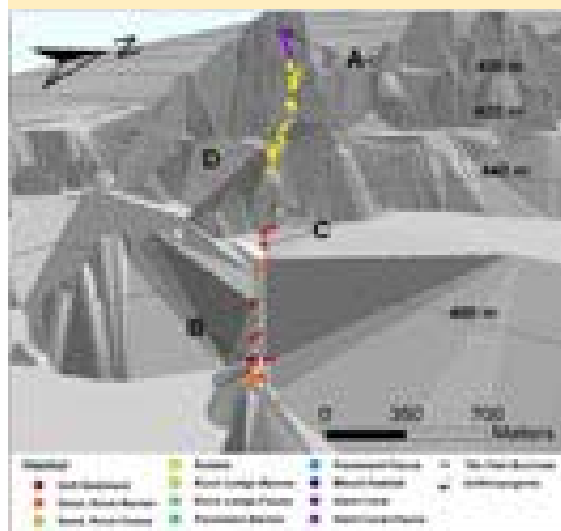


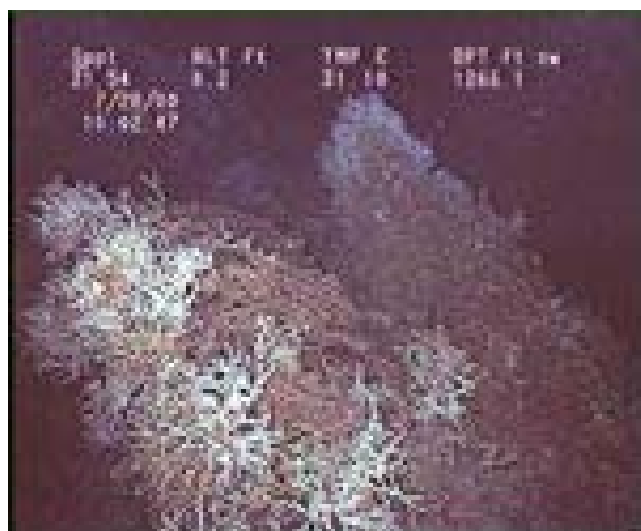
**DIVE NUMBER: JSLI-4206****STUDY AREA: Cape Lookout Lophelia A****STATION OVERVIEW**

<b>Project</b>	Slope Trophodynamics
<b>Principal investigators</b>	SW Ross <sup>1</sup> KJ Sulak
<b>PI Contact Info<sup>1</sup></b>	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
<b>Purpose</b>	Initial Lophelia community and habitat assessment off NC
<b>Vessel</b>	R/V Ed Link, Johnson Sea Link I Submersible
<b>Science Divers</b>	KJ Sulak (bow), SW Ross (stern)
<b>External Video Tapes</b>	1 Hi 8
<b>Internal Video Tapes</b>	1 mini DV
<b>Digital Still Photos</b>	0
<b>Positioning System</b>	dGPS
<b>CTD File</b>	<input checked="" type="checkbox"/>
<b>Specimens Collected</b>	<input checked="" type="checkbox"/>
<b>Other</b>	Hard copies of bow and stern audio logs
<b>Acknowledgements</b>	NC State Legislature, USGS, UNCW, NC Coastal Reserve
<b>SEADESC Analyst</b>	AM Quattrini, ML Partyka
<b>Date Compiled</b>	11/16/2006

**GENERAL LOCATION****Dive Track:****DIVE DATA**

<b>Date</b>	28-Jul-00
<b>Minimum Bottom Depth (m)</b>	385
<b>Maximum Bottom Depth (m)</b>	470
<b>Start Bottom Time (EDT)</b>	8:42
<b>End Bottom End (EDT)</b>	10:36
<b>Starting Latitude (N)</b>	34° 19.633'
<b>Starting Longitude (W)</b>	75° 46.330'
<b>Ending Latitude (N)</b>	34° 19.447'
<b>Ending Longitude (W)</b>	75° 47.246'
<b>Surface Current (Kts)</b>	3
<b>Bottom Current (Kts)</b>	

**Image A: Hard Coral**  
34° 19.460' N, 75° 47.250' W



## DIVE NUMBER: JSLI-4206

## STUDY AREA: Cape Lookout Lophelia A

### IMAGE GALLERY

\* indicates image position is approximated

Image B: Sand/ Rubble/Rock-  
Barren

34° 19.600' N, 75° 46.440' W



Image C: Soft Substrate

34° 19.560' N, 75° 46.630' W



Image D: Rubble

34° 19.52' N, 75° 47.070' W



### RELEVANT WORK AND/OR LITERATURE CITED

Uchupi (1967)

R/V Eastward training cruise 1966 (photo in Rowe and Menzies 1968 and Menzies et al. 1973)

NR-1 submersible cruise Nov 1993 (Sulak and Ross unpubl. data)

R/V Cape Hatteras cruises Aug 2001 & Sep 2006 (S.W. Ross, unpubl. data)

EEZ-SCAN 87 Scientific Staff (1991)

Reed and Ross (2005)

Ross and Nizinski (in press)

### BIOLOGICAL ENVIRONMENT

Some species observed off reef, on scattered rubble, sand, and scattered rock bottom included: crabs, hermit crabs, *Fenestrella plutonia*, *Helicolenus dactylopterus*, and *Myxine glutinosa*. On a more dense coral rubble bottom, *Bathynectes longispina*, *Laemonema barbatulum*, urchins, glass sponges, and galatheoids (*Eumunida picta*) were observed. On the hard corals habitat, *Eumunida picta*, pencil urchins, *Rochinia crassa*, *Novodinia antillensis*, *Laemonema melanurum*, and *Hoplostethus occidentalis* were species most commonly observed.

### PHYSICAL ENVIRONMENT

Five general habitat types were viewed during this dive: 1) off-reef, soft substrate habitat consisting of mostly coarse sand, 2) coarse sand with <50% *Lophelia pertusa* rubble, and at times scattered rock without attached macrofauna, 3) coarse sand/*Lophelia* rubble/rock with attached macrofauna, 4) a transition zone with a high percent (>50%) cover of *Lophelia* rubble, and 5) a hard coral area with dense dead and live *Lophelia*.

### ADDITIONAL COMMENTS

This dive was captured on 1 Hi-8 and archived on 2 mini DVs and 1 DVD. While there was audio associated with the original Hi-8 tape, a playback error prevented this from recording to DV. The overall picture was grainy and the lighting was often too low to have a clear view of the habitat and/or organisms inhabiting the area. Additionally, the time/CTD overlay was intermittent.